Please enter. Thanks.

Ro 5/19/2005.

AMENDMENTS TO THE SPECIFICATION

Please replace the following paragraphs of the specification:

Each switching element T1, T2, T3, and T4 includes a conducting state and a non-[0060] conducting state. The state of the switching element T1 is controlled by the first control signal C1. In one construction, the first control signal C1 controls the state of the switching element T1 via a switch (e.g., a MOSFET). The state of the switching element T2 is controlled by the third control signal C3. In one construction, the third control signal C3 controls the state of the switching element T2 via a switch (e.g., a MOSFET). The state of the switching element T3 is controlled by the fourth control signal C4. The state of the switching element T4 is controlled by the second control signal C2. Accordingly, the first pair of switching elements is in a conducting state when both switching elements T1 and T3 T1 and T4 are in a conducting state, and the first pair of switching elements is in a non-conducting state when at least one of the switching elements T1 and T3 T1 and T4 is in a non-conducting state. Similarly, the second pair of switching elements is in a conducting state when both switching elements T2 and T3 are in a conducting state, and the second pair of switching elements is in a non-conducting state when at least one of the switching elements T2 and T3 is in a non-conducting state. The first and second delays 224 and 232 are utilized to ensure the first and second pairs of switching elements are not simultaneously in a conducting state. Simultaneous conductance of both pairs of switching elements may adversely effect the operation of the sensor 216, as well as shorting the upper rail direct current voltage DC1 to ground GND resulting in excessive power dissipation. Therefore, the second pair of switching elements is in a non-conducting state when the first pair of switching elements is in a conducting state and the first pair of switching elements is in a nonconducting state when the second pair of switching elements is in a conducting state. In other constructions, other types of switching circuits are utilized.

[0064] The first and second AND gates 236 and 240 receive an input representative of the override condition signal L. If an override condition exists, the override condition signal L is utilized to change control the second and fourth control signal Signals C2 and C4 so the second control signal C2 is different than the first control signal C1 and the fourth control signal C4 is

different than the third control signal C3. When the first and second control signals C1 and C2 are different, the switching circuit 244 limits the current I1 through the coil 64 in the first direction. When the third and fourth control signals C3 and C4 are different, the switching circuit 244 limits the current I2 through the coil 64 in the second direction. The switching circuit 244 limits current through the coil 64 by stopping the application of the upper rail direct current voltage DC1 to the coil 64. Current may continue to flow through portions of the switching circuit 244 after application of the upper rail direct current voltage DC1 is stopped.